Claims:

1.   A Mass Viewer Audience Response Detection (MVARD) gateway for providing real time feedback to an interactive application displayed live on at

5   least one display screen together with at least one callback telephone number for enabling members of a mass viewer audience watching the interactive application and calling a callback telephone number of the at least one callback telephone number to actively participate therein, the MVARD gateway comprising a controller for controlling at least one digital telephony interface board to establish

10   inbound half duplex line connections with callers' telephones on receiving circuit based telephone calls therefrom for determining callers' DTMF key depressions corresponding to their real time responses to the interactive application, and transmitting real time information regarding callers' responses for providing real time feedback to the mass viewer audience watching the interactive application,

15   and particularly the callers continuously holding their telephones like a hand held TV remote control and depressing the DTMF keys on their telephones to input their responses to actively participate therein without interrupting their participation to listen to pre-recorded playback messages regarding DTMF key assignments.

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2.   The gateway according to Claim 1 constituted by a circuit based MVARD gateway including at least one call control type digital telephony interface board for establishing said inbound half duplex line connections and detecting callers' DTMF key depressions.

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3.   The gateway according to Claim 1 constituted by a transaction based MVARD gateway for deployment as a Service Control Point (SCP) in an Intelligent Network (IN), said transaction based MVARD gateway including at least one transaction type digital telephony interface board supporting Single

30   Ended Calls and Mid-Call Interruption features for establishing said inbound

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half duplex line connections and issuing queries for determining callers' DTMF key depressions.

4.   The gateway according to Claim 3 wherein said transaction based MVARD gateway is a standalone SCP.

5.   The gateway according to Claim 3 wherein said transaction based MVARD gateway is an open standard SCP.

6.   A communication platform for enabling mass viewer audience circuit based real time participation in an interactive application displayed live on at least one display screen, the platform comprising:

(a)   an application server for providing real time feedback to an interactive application displayed live on at least one display screen together with at least one callback telephone number for enabling members of a mass viewer audience watching the interactive application to call a callback telephone number of the at least one callback telephone number to actively participate therein; and

(b)   a Mass Viewer Audience Response Detection (MVARD) gateway on receiving circuit based telephone calls from callers' telephones, establishing inbound half duplex line connections with callers' telephones for determining callers' DTMF key depressions corresponding to their real time responses to the interactive application, and transmitting real time information regarding the callers' responses to said application server for providing real time feedback to the mass viewer audience watching the interactive application, and particularly the callers continuously holding their telephones like a hand held TV remote control and depressing on the DTMF keys on their telephones to input their responses to actively participate therein without interrupting their participation to listen to pre-recorded playback messages regarding DTMF key assignments.

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7.   The platform according to Claim 6 wherein said MVARD gateway is constituted by a circuit based MVARD gateway including at least one call control type digital telephony interface board for establishing said inbound half duplex line connections and detecting callers' DTMF key depressions.

8.   The platform according to Claim 6 wherein said MVARD gateway is constituted by a transaction based MVARD gateway for deployment as a Service Control Point (SCP) in an Intelligent Network (IN), said transaction based MVARD gateway including at least one transaction type digital telephony interface board supporting Single Ended Calls and Mid-Call Interruption features for establishing said inbound half duplex line connections and issuing queries for determining callers' DTMF key depressions.

9.   The platform according to Claim 8 wherein said transaction based MVARD gateway is a standalone SCP.

10.   The platform according to Claim 8 wherein said transaction based MVARD gateway is an open standard SCP.

11.   The platform according to any one of Claims 6 to 10 and further comprising an IVR for selectively playing back pre-recorded playback messages to callers including a welcome playback message confirming that they are participating in the interactive application which they called.

12.   The platform according to Claim 11 wherein said IVR plays back pre-recorded questions to callers whose responses thereto are employed for data processing purposes of their responses to the interactive application.

13.   The platform according to any one of Claims 6 to 12 and further comprising a message server for selectively transmitting visual messages to callers' telephones.

14.   A method for enabling mass viewer audience circuit based real time participation in an interactive application displayed live on at least one display screen, the method comprising the steps of:

(a)   displaying an interactive application live on at least one display screen together with at least one callback telephone number for enabling members of a mass viewer audience watching the interactive application to call a callback telephone number of the at least one callback telephone number to actively participate therein;

(b)   on receiving circuit based telephone calls from callers' telephones, establishing inbound half duplex line connections with callers' telephones for determining callers' DTMF key depressions corresponding to their real time responses to the interactive application; and

(c)   transmitting real time information regarding callers' responses for providing real time feedback to the mass viewer audience watching the interactive application, and particularly the callers continuously holding their telephones like a hand held TV remote control and depressing the DTMF keys on their telephones to input their responses to actively participate therein without interrupting their participation to listen to pre-recorded playback messages regarding DTMF key assignments.

15.   The method according to Claim 14 wherein the MVARD gateway is constituted by a circuit based MVARD gateway including at least one call control type digital telephony interface board for establishing the inbound half duplex line connections and detecting callers' DTMF key depressions.

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16.   The method according to Claim 14 wherein the MVARD gateway is constituted by a transaction based MVARD gateway for deployment as a Service Control Point (SCP) in an Intelligent Network (IN), said transaction based MVARD gateway including at least one transaction type digital telephony interface board supporting Single Ended Calls and Mid-Call Interruption features for establishing the inbound half duplex line connections and issuing queries for determining callers' DTMF key depressions.

17.   The method according to Claim 16 wherein said transaction based MVARD gateway is a standalone SCP.

18.   The method according to Claim 16 wherein said transaction based MVARD gateway is an open standard SCP.

19.   The method according to any one of Claims 14 to 18 and further comprising the step of selectively playing back pre-recorded playback messages to callers including a welcome playback message confirming that they are participating in the interactive application which they called.

20.   The method according to Claim 19 and further comprising the step of playing back pre-recorded questions to callers whose responses thereto are employed for data processing purposes of their responses to the interactive application.

21.   The method according to any one of Claims 14 to 20 and further comprising the step of selectively transmitting visual messages to callers' telephones.